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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/913,008

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Christian Terfloth

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2033

7590

12/07/2004

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EXAMINER

ROBERTSON, JEFFREY

ART UNIT

PAPER NUMBER

1712

DATE MAILED: 12/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/913,008

Applicant(s)

TERFLOTH ET AL.

Examiner

Jeffrey B. Robertson

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 23 August 2004 and 24 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 47-80 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 47-80 is/are rejected.
- 7) ☒ Claim(s) 52,67 and 80 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Priority*

1. Acknowledgment is made of applicant's claim for priority under 35 U.S.C. 119(a)-(d) based upon PCT/DE00/00384 filed on February 10, 2000. A claim for priority under 35 U.S.C. 119(a)-(d) cannot be based on said application, since the United States application was filed more than twelve months thereafter.

### *Specification*

2. The disclosure is objected to because of the following informalities: The specification, especially on page 6, lines 7-18, does not identify the type of molecular weight of the isocyanate reactive polymer. Since there may be large variations in molecular weight depending on whether the molecular weight is expressed as a number average molecular weight or a weight average molecular weight, the specification does not provide sufficient direction to one of ordinary skill in the art to select the appropriate polymer.

Appropriate correction is required.

### *Claim Objections*

3. Claims 52, 67, and 80 are objected to because of the following informalities:

For claim 52, the claim depends from claim 47. Claim 47 requires that the molecular weight of the isocyanate reactive polymer is *more than* 8,000 g/mol. Claim 52 states that the molecular weight of the isocyanate reactive polymer is *from* 8,000

g/mol. Therefore claim 52 appears to include polymers of 8,000 g/mol while claim 47 requires that the polymer have a molecular weight greater than 8,000 g/mol. Thus claim 52 fails to further limit the limitations of claim 47.

For claim 67, in line 5, "I" should be changed to "1".

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 47-80 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

For claims 47, 52, 58, 60, 65, and 75, the claims do not identify whether the molecular weight specified is number average or weight average molecular weight. One of ordinary skill in the art would not know how to select an appropriate polymer without the identification of the type of molecular weight. See the objection to the specification above.

6. Claims 54, 67, 77, and 80 are rejected because the specification, while being enabling for resins in the first adhesive component, does not reasonably provide enablement for resins present in the second adhesive component. The specification

does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims.

In the specification, on page 6, lines 20-27, applicant states that the resins claimed in claims 54, 67, 77, and 80 can be used in the first adhesive component. However, in claims 54 and 67, applicant claims that the resins are used in the second adhesive component as well as the first component. The specification does not enable this claimed embodiment.

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 58-62, 64-68, 78, and 80 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rossitto (U.S. Patent No. 5,977,283) in view of Helmeke et al. (U.S. Patent No. 5,869,593) and Yang et al. (U.S. Patent No. 6,207,248).

For claims 58 and 60, in column 2, lines 25-45, Rossitto teaches adhesives with superior characteristics. In column 2, line 65 through column 3, line 26, Rossitto discloses a hot melt adhesive that contains an isocyanate-reactive polymer and a polyfunctional isocyanate. In column 4, line 52 through column 5, line 11, Rossitto teaches that the molecular weight of the isocyanate-reactive polymer is preferably between 8,000 and 15,000 Da. For claim 65, in column 5, lines 33-48, Rossitto teaches that the isocyanate-reactive polymer is a polyester containing hydroxyl groups. For claims 58, 60, 66, and 68, in column 7, lines 35-39, Rossitto teaches the presence of 80-90 parts by weight of the isocyanate-reactive component and 10 to 20 parts of the isocyanate, which corresponds to an amount of isocyanate-reactive polymer of 80-90% by weight. This is within applicant's range, where the ratio of (a) to (b) is from 4:1 to 9:1. Here, for claim 58, Rossitto teaches that the blending takes place while heating. Under this melt blending process, the components are blended to a liquid state.

For claims 58 and 60, in column 8, lines 14-28, Rossitto teaches that the components may be present in granular form.

For claim 64, in column 6, lines 19-62, Rossitto teaches that the isocyanate is preferably present in solid form at room temperature and may be TDI.

For claim 67, Rossitto does not teach that a resin is present; corresponding to applicant's an amount of 0% by weight.

For claim 59, in column 9, lines 12-26, Rossitto teaches that the adhesive package is stored for up to 6 months, which would allow for transportation to the automotive upholstering plant.

For claim 60, in column 8, lines 55-64, Rossitto teaches that the composition is converted into a film by conventional casting or film extrusion techniques, which involve the use of die applications.

For claims 58, 60, 62, and 78, Rossitto fails to teach the presence of polymer that is not isocyanate reactive and is selected from the group consisting of ethylene/vinyl-acetate copolymer and/or polyolefin.

In column 3, lines 10-16, Helmeke teaches that thermoplastic components are added to polyurethane hot melt adhesives to improve film forming characteristics. In column 6, line 33 through column 7, line 4, Helmeke teaches that ethylene/vinyl-acetate copolymers available under the tradename of Elvax® are added in an amount of preferably 5 to 20% by weight of the composition. Yang teaches in column 13, lines 30-33, that particular ethylene/vinyl-acetate copolymers available under the tradename of

Elvax® suitable for hot melt adhesives have a vinyl-acetate content of 33% and a melt index of from 400.

Rossitto and Helmeke are analogous art in that they both teach hot melt adhesives that contain polyurethane forming ingredients. Yang is analogous art because it teaches polyurethane hot melt adhesives containing Elvax® ethylene/vinyl-acetate copolymers.

It would have been obvious to one of ordinary skill in the art at the time of the invention to use the ethylene/vinyl-acetate copolymers of Helmeke with the particular Elvax® copolymers set forth in Yang in the hot-melt adhesives of Rossitto. The motivation would have been that Helmeke teaches that the addition of these copolymers improves film-forming properties. The motivation to add the particular copolymers taught by Colon would have been that Helmeke teaches a broad genus of copolymers that may be added, namely those ethylene/vinyl-acetate copolymers with the tradename Elvax®. One of ordinary skill in the art would have turned to Yang for specific copolymers within the genus that are particularly suitable for hot-melt adhesives.

### ***Response to Arguments***

11. Applicant's arguments filed 9/24/04 have been fully considered but they are not persuasive.

Applicant argues that claims 26 and 41, now represented as claims 54, 67, 77, and 80, are supported by claims 7 to 9 of the PCT application. However, the PCT application is in German and therefore the examiner cannot verify applicant's argument. Therefore this rejection is continued.



Applicant argues that the claim for priority under 35 U.S.C. §119 is proper pursuant to 35 U.S.C. § 363. However, this section of the statute is not the correct section pertaining to a *foreign* priority claim. Applicant additionally claims foreign priority to the international application under 35 U.S.C. §119(a)-(d). The examiner submits that the pertinent section of the statute for this claim is 35 U.S.C. § 365. This section states that a priority claim may be granted to an international application designating at least one other country besides the U.S. However, the claim must still conform to the requirements of 35 U.S.C. §119(a)-(d). The requirement of 35 U.S.C. §119(a) requires that the U.S. application be filed within twelve months of the filing of the foreign application. This is not the case here since the international application was filed on February 10, 2000, which is 20 months prior to the filing of the U.S. application. Thus, applicant is not entitled to a claim of *foreign* priority to the international application.

Regarding applicant's argument that one of ordinary skill in the art would recognize that the designation of grams/mol was intended as weight average molecular weight, the examiner disagrees. There is no evidence on the record that supports this assertion. Further, this seems to be inconsistent with the molecular weights set forth for the polyolefin in, for example, claim 49. In this claim, applicant uses the designation " $M_n$ " to represent molecular weight of the polyolefin, which is expressed in grams per mol. However, as is commonly recognized in the art,  $M_n$  is used to designate number-average molecular weight. " $M_w$ " is commonly used to represent weight-average molecular weight. Therefore applicant's assertions appear to be inconsistent with the instant specification and claims.

Regarding applicant's arguments with respect to new independent claims 58 and 60, applicant first argues that Rossitto and Helmke disclose one component systems and that the blends of Rossitto are at least partially reacted. Applicant argues that the present claims are distinguishable from this because they are directed to multicomponent systems, and therefore Rossitto and Helmke actually teach away from the present claims. With respect to claims 58 and 60, the examiner disagrees. First, it is noted that in column 8, lines 14-28, that Rossitto teaches that when the two components are mixed, they can be mixed so that there is no significant reaction between the two components. The partial reaction can take place at a later stage, i.e. in the film making process. Thus, the partial reaction required by Rossitto can take place when the film is made. In the methods of claims 58 and 60, the disclosure of Rossitto corresponds to the methods set forth in the claims in that the polyester is a "first component" that is combined with the isocyanate as a "second component". It is also noted that these claims do not require the presence of the components as having existed as *separate* entities for any particular length of time.

Regarding applicant's argument that the examiner has relied on non-analogous art, the examiner disagrees. Both Rossitto and Helmeke (and Yang) are directed to hot-melt polyurethane adhesives and are therefore analogous art. In addition it is recognized that the combination of two references need not be for the same reason as set forth by applicant. The reason or motivation to modify the reference may often suggest what the inventor has done, but for a different purpose or to solve a different problem. It is not necessary that the prior art suggest the combination to achieve the

same advantage or result discovered by applicant. In re Linter, 458 F.2d 1013, 173 USPQ 560 (CCPA 1972); In re Dillon, 919 F.2d 688, 16 USPQ2d 1897 (Fed. Cir. 1990), cert. denied, 500 U.S. 904 (1991).


Regarding applicant's comments with respect to the International Preliminary Examination Report, there is no indication that the art cited by the examiner was considered by that authority. Therefore, a determination of novelty or inventive step of the instant claims over the art cited in the Report is not relevant to the rejection set forth by the examiner.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey B. Robertson whose telephone number is (571) 272-1092. The examiner can normally be reached on Mon-Fri 7:00-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Jeffrey B. Robertson  
Primary Examiner  
Art Unit 1712

JBR